





Query Match	54.1%	Score	99;	DB	21;	Length	13;
Best Local Similarity	100.0%	Pred.	No.	4.2e-05;			
Matches	13;	Conservative	0;	Mismatches	0;	Indels	0;
Sequence	13 AA;						
RESULT	4						
RAY92797		RAY92797	standard:	peptide;	14 AA.		
AAY92797;							
29-AUG-2000	(first entry)						
Synthetic antimicrobial peptide, Ser-Rev4-OH.							
Magainin; antimicrobial; transgenic plant; protease degradation; Rev4;							
indolicidin; protein production; reverse peptide.							
Synthetic.							
WO2002026344-A1.							
11-MAY-2000.							
29-OCT-1999;	99WO-US25561.						
30-OCT-1998;	98US-0106373.						
02-NOV-1998;	98US-0106537.						
(INTE-) INTERLINK BIOTECHNOLOGIES LLC. (KENT ) UNIV KENTUCKY RES FOUND.							
Everett, NP, Li, Q, Lawrence, C, Davies, MH;							
WPI; 2000-365597/31.							
Polypeptides for reducing proteolytic degradation of proteins administered to, or produced by a plant comprise indolicidin or its functional equivalents							
Claim 3; Page 34; 50pp; English.							
Indolicidin is a potent antimicrobial tridecapeptide, originally purified from cytoplasmic granules of bovine neutrophils. A non C-terminal amide analogue of Rev4 (reverse indolicidin) with an additional N-terminal Ser was found to have increased stability against Plant protease degradation as well as potent antifungal activity. Expression of antimicrobial peptides in transgenic plants suffers a major limitation in that the foreign peptides are susceptible to rapid degradation by proteases. The invention concerns reducing the extent of protease degradation of a protein applied to, or produced by a plant by administering indolicidin, Rev4 or a functional equivalent to the plant. Transgenic plants expressing indolicidin and Rev4 are useful for production of the antimicrobial peptides. Compositions containing indolicidin and Rev4 are also useful for production of agronomically important proteins in plants.							
Sequence 14 AA;							

AAY9240  
 ID AAY92840 standard; Protein; 68 AA.  
 XX  
 AC AAY92840;  
 XX  
 DT 29-AUG-2000 (first entry)  
 XX  
 DE Rev4-PR-1b fusion.  
 XX  
 KW Magainin; antimicrobial; transgenic plant; protease degradation; Rev4;  
 KW Indolicidin; protein production; reverse peptide; s.s.  
 XX  
 OS synthetic.  
 XX  
 WO200026344-A1.  
 XX  
 PD 11-MAY-2000.  
 XX  
 PF 29-OCT-1999; 99WO-US25561.  
 XX  
 PR 30-OCT-1998; 98US-0106373.  
 PR 02-NOV-1998; 98US-0106537.  
 XX  
 PA (INTE-) INTERLINK BIOTECHNOLOGIES LLC.  
 PA (KENT) UNIV KENTUCKY RES FOUND.  
 XX  
 PI Everett NP, Li Q, Lawrence C, Davies MH;  
 DR WPI; 2000-365597/31.  
 DR N-PADB; AAK28519.  
 XX  
 PT Polypeptides for reducing proteolytic degradation of proteins  
 .PT administered to, or produced by a plant comprise indolicidin or its  
 functional equivalents  
 XX  
 PS disclosure; Page 35-36; 50pp; English.  
 XX  
 CC Indolicidin is a potent antimicrobial tridecapeptide, originally  
 purified from cytoplasmic granules of bovine neutrophils. Reverse  
 peptide, Rev4 of indolicidin (see AAY92794) was found to have increased  
 stability against plant protease degradation. Expression of antimicrobial  
 peptides in transgenic plants suffers a major limitation in that the  
 foreign peptides are susceptible to rapid degradation by proteases. The  
 invention concerns reducing the extent of protease degradation of a  
 protein applied to, or produced by a plant by administering indolicidin,  
 Rev4 or a functional equivalent to the plant. Transgenic plants  
 expressing indolicidin and Rev4 are useful for production of the  
 antimicrobial peptides. Compositions containing indolicidin and Rev4 are  
 also useful for production of agronomically important proteins in  
 plants.  
 CC  
 SQ sequence 68 AA;  
 Query Match 54.1%; score 99; DB 21; Length 68;  
 Best Local Similarity 100.0%; Pred. No. 0.00021;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Oy 1 RRWPPWPKWPPLI 13  
 Db 56 rrwppwPKWPPLI 68  
 RESULT 7  
 AAY8137  
 ID AAY8137 standard; peptide; 15 AA.  
 AC AAY8137;  
 XX  
 DT 07-MAR-2000 (first entry)  
 DE Gonadotropin releasing hormone (GnRH) peptide analogue 1.  
 XX

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KW Gonadotropin releasing hormone; GnRH; leukotoxin; LKT; fusion protein;  
 KW antibody; immunogenic; chimeric; vaccine; testosterone; androgenic;  
 KW non-androgenic; steroid; reduction; weight gain; muscle distribution;  
 KW fat distribution; male pattern; boar taint; flavour; impairment;  
 KW reliable; immunoabortion; meat production.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT Misc-difference 1-6  
 FT /note= "D-form residues"  
 FT Modifies-site 15  
 FT /note= "C-terminally conjugated to ethyl amide"  
 FT  
 XX  
 PN WO9956771-A2.  
 XX  
 PD 11-NOV-1999.  
 XX  
 PF 05-MAY-1999; 99WO-CAD0360.  
 XX  
 PR 05-MAY-1998; 98US-0084217.  
 XX  
 PA (BIOS-) BIOSTAR INC.  
 XX  
 PI Manns JG, Acres SD, Harland R;  
 XX  
 DR WPI; 2000-062125/05.  
 XX  
 PT Production of uncastrated male food animals using vaccines -  
 XX  
 PS Disclosure; Page 11; 87pp; English.  
 XX  
 CC Sequences AAY8136 Y58141 represent gonadotropin releasing hormone  
 (GNRH) analogues which may be used as an alternative to sequence  
 AAY8135 in embodiments of the present invention. The invention  
 relates to a method of using two GNRH immunogen vaccines to produce  
 uncastrated male animals for meat production, one vaccination prior to  
 CC or during the fattening period to reduce circulating testosterone  
 CC levels, and the second vaccination about 2-8 weeks before slaughter to  
 CC substantially reduce androgenic and/or non-androgenic steroids. The  
 CC invention is used to produce food animals that exhibit the weight gain  
 CC and muscle/fat distribution of male animals without the problems  
 CC associated with male animals. Such problems include "boar taint", a  
 CC urine-like odour found in cooked meat of uncastrated pigs which is  
 CC caused by steroids stored in the tissues, and similar flavour  
 CC impairments in the meat of other intact male animals. The invention is  
 CC more reliable than prior art immunoabortion techniques.  
 XX  
 SQ sequence 15 AA;  
 Query Match 42.9%; score 78.5; DB 21; Length 15;  
 Best Local Similarity 54.5%; Pred. No. 0.0091; 3; Mismatches 7; Indels 7; Gaps 1;  
 Matches 12; Conservative 0;  
 Oy 5 WWPWKPKLIGGGDAPPPPP 26  
 Db 1 wwwwwp-----pppppp 15

RESULT 8  
 AAW13809  
 ID AAW13809 standard; peptide; 14 AA.  
 XX  
 AC AAW13809;  
 XX  
 DT 10-DEC-1997 (first entry)  
 XX  
 DE Antimicrobial cationic peptide CP-13.  
 XX  
 KW Bacterial; viral; antitumour; food; preservative; inhibitor; growth;  
 KW bacterium; yeast; endotoxemia; sepsis; antibiotic; fungal;  
 KW antiviral; Candida albicans; sterilant; Salmonella; Yersinia;

**KW** Shigella.  
**XX**  
**OS** Synthetic.  
**XX**  
**PN** WO9708199-A2.  
**XX**  
**PD** 06-MAR-1997.  
**XX**  
**PF** 23-AUG-1996; 96WO-IB00996.  
**XX**  
**PR** 23-AUG-1995; 95US-0002687.  
**XX**  
**PA** (UYBR-) UNIV BRITISH COLUMBIA.  
**XX**  
**PI** Falla TJ, Gough M, Hancock REW;  
**XX**  
**DR** WPI; 1997-179179/16.  
**PT** Cationic peptide(s) having anti-microbial activity - used for the inhibition of bacterial and viral growth, as an antitumour agent, PT and as a food preservative  
**XX**  
**PS** Claim 8; Page 68; 89pp; English.  
**XX**  
**CC** The present sequence represents a specifically claimed novel isolated cationic peptide which has antimicrobial activity. The amino acid sequence of antimicrobial cationic peptides (including the present sequence) is selected from: X1X1Prox2X3XProx2X2Pro(x2X3(X5)O; X1X1Prox2X3X4(X5)Prox2X3X3; X1X1X3(ProTP)uX2X2X2X2X5X2(X5)O; X1X1X3X3X2Pro(x2X2Pro)n2(X5)m; where m = 1-5; n = 1-2; o = 2-5; r = 0-8; u = 0-1; X1 = Ile, Leu, Val, Phe, Tyr, Trp or Met; X2 = Trp or Phe; X3 = Arg or Lys, X4 = Trp or Lys, and X5 = Phe, Trp, Arg, Lys or Pro. The peptides are preferably amidated or carboxymethylated. The peptides may be used in methods for inhibiting the growth of a bacterium or yeast, or for inhibiting an endotoxaemia or sepsis associated disorder in a subject. The peptides have a broad activity against medicinally important bacteria, combined with activity against the are useful as antimicrobial agents and/or antiviral agents. The peptides may be used as sterilants or preservatives of materials susceptible to microbial or viral contamination, e.g. in processed foods to inhibit Salmonella, Yersina and Shigella. The peptides are compact and tend to have a unique polyproline type II extended helix structure that permits them to span the membrane with relatively few amino acids. The peptides possess the ability to work synergistically with antibiotics, and in addition, some of them possess anti-endotoxin activity.  
**XX**  
**SQ** Sequence 14 AA:  

```

Query Match Score 78; DB 18; Length 14;
Best Local Similarity 80.0%; Pred. No. 0.0097; Matches 8; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

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QY	1 RKKWPWWPKW 10
Db	3 kkwpwwpkw 12

  
**RESULT 9**  

ID	AAW13801
AC	AAW13801;
DT	10-DEC-1997 (first entry)
XX	DE Antimicrobial cationic peptide CP-27.

Query Match Score 42.6%; Score 78; DB 18; Length 14;  
Best Local Similarity 80.0%; Pred. No. 0.0097; Matches 8; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY	1 RKKWPWWPKW 10
Db	3 kkwpwwpkw 12

  
**RESULT 10**  

ID	AAB97443
AC	AAB97443;
DT	31-JUL-2001 (first entry)
XX	DE Peptide nucleic acid peptide fragment #11.
XX	Peptide nucleic acid; PNA; antibiotic; antisense; enterococcus;
KW	Bacterium; viral; antitoxaemia; food; preservative; inhibitor; growth;
KW	bacterial; yeast; endotoxaemia; sepsis; antibiotic; fungal; antiviral; Candida albicans; sterilant; Salmonella; Yersina; Shigella.
OS	Synthetic.

Query Match Score 41.0%; Score 75; DB 18; Length 15;  
Best Local Similarity 70.0%; Pred. No. 0.022; Matches 7; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY	1 RRWPWWPKW 10
Db	3 kkwpwwpkw 12

XX		OS	Synthetic.
FH	Key		
FT	Modified-site	Location/Qualifiers	
FT	11	/label= OTHER	
FT		/note= "optionally linked to AAR89184 by CYS	
FT		-succinimidyl 4(N-maleimidomethyl)cyclohexane-1	
FT		-carboxylate-8-amino-3,6-dioxaoctanoic acid"	
XX	WO200127261-A2.		
PN			
XX			
PD	19-APR-2001.		
XX			
PF	13-OCT-2000; 2000WO-DK00580.		
PR	13-OCT-1999; 99DK-0001467.		
PR	13-OCT-1999; 99DK-0001471.		
PR	15-OCT-1999; 99US-0159679.		
PR	15-OCT-1999; 99US-0159684.		
PR	03-DEC-1999; 99DK-0001734.		
PR	03-DEC-1999; 99DK-0001735.		
PR	28-MAR-2000; 2000DK-0000522.		
PR	19-APR-2000; 2000DK-0000670.		
PR	19-APR-2000; 2000DK-0000671.		
PR	14-JUN-2000; 2000US-0211435.		
PR	14-JUN-2000; 2000US-0211758.		
PR	14-JUN-2000; 2000US-0211878.		
PA	(PANT-) PANTHECO AS.		
PT	Nielsen PE, Good L, Hansen HF, Beck F, Malik L, Schou C;		
PI	Wissenbach M, Giewerman BK;		
XX			
DR	WPI; 2001-273770/28.		
XX			
PT	New modified peptide nucleic acids and oligonucleotides, useful for		
PT	treating and preventing bacterial infections and disinfecting		
PT	non-living objects -		
XX			
PS	Claim 16; Page 68; 81PP; English.		
XX			
CC	The present invention provides the sequences of a number of peptide		
CC	nucleic acids (PNAs) joined by linker sequences. These are capable of		
CC	crossing bacterial cell walls due to the presence of the linker. The PNAs		
CC	can be used as antimicrobial agents, particularly as antibiotics against		
CC	E. coli, vancomycin-resistant enterococci and <i>Staphylococcus aureus</i> . The		
CC	present sequence is the peptide fragment of a PNA of the invention.		
XX			
SQ	Sequence 11 AA;		
Query Match	39.9%; Score 73; DB 22; Length 11;		
Best Local Similarity	100.0%; Pred. No. 0.028;		
Matches	9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;		
QY	1 RRWPPWPWK 9		
Db	2 rrwppwpwk 10		
RESULT	11		
AAR74454			
ID	AAR7454 standard; peptide; 13 AA.		
AC	AAR7454;		
XX			
DT	25-MAR-1996 (first entry)		
XX			
DE	Indolicidin analog #1.		
XX			
KW	Indolicidin; microbicide; therapeutic agent; prophylactic;		
KW	food preservative; disinfectant; medication; Gram positive bacteria;		
KW	Gram negative bacteria; protozoa; yeast; fungi; viruses.		
XX			
RESULT	12		
AY24549			
XX			
DT	18-AUG-1999 (first entry)		
XX			
DE	Indolicidin analogue #1.		
XX			
KW	Indolicidin; bacterial infection; photo-oxidised solubiliser;		
KW	antimicrobial; antibiotic; antiarrhythmic; surface disinfectant;		
KW	additive; shampoo; soap; insecticide; herbicide; preservative;		
KW	food; technical material.		
OS	Synthetic.		

PN WO9807745-A2.  
 XX  
 PD 26-FEB-1998.  
 XX  
 PP 21-AUG-1997; 97WO-US14779.  
 XX  
 PR 13-JAN-1997; 97US-0034949.  
 XX  
 PR 21-AUG-1996; 96US-0024754.  
 XX  
 PA (MICR-) MICROLOGIX BIOTECH INC.  
 XX  
 PI Erfle D, Fraser JR, Krieger TJ, Taylor R, West MH;  
 DR  
 XX  
 PT New indolicidin analogues with antimicrobial activity and related  
 PT nucleic acid - vectors, transformed cells and antibodies, also  
 PT conjugates with polyoxalkylene glycol and fatty acid to reduce  
 PT toxicity, useful therapeutically, as disinfectants etc.  
 XX  
 PS Claim 11; Page 88; 129pp; English.  
 XX  
 CC AAY24549 to AAY24615 represent indolicidin analogues of formulae  
 CC (I)-(VIII) containing up to 25 amino acids (aa): RXXXXB (I), BXXXXXB  
 CC (II), BBBXXZXXB (III), BXZXXXB(BB)(AA)nLBAGS (IV), BXZXXXB(AA)nM  
 CC (V), LBBNXXZXXNKR (VI), LKNZXXZKRR (VII) and BBXZXXZBBB (VIII).  
 CC Where Z = P or V; X = hydrophobic residue, preferably W; B = basic aa,  
 CC preferably R or K; AA = any aa; n = 0 or 1; in (III), at least 1 Z = V;  
 CC in (VIII), at least 2 X = F or Y. The analogues are used to treat  
 CC infections caused by bacteria (Gram positive or negative, or anaerobic);  
 CC fungi (yeast or moulds); parasites (protozoa, nematodes, cestodes or  
 CC trematodes) or viruses. Typical of very many pathogens that can be  
 CC controlled are Leishmania, Trypanosoma, Ascaris lumbricoides, fasciola  
 CC hepatica, Klebsiella pneumoniae, Bordetella Pertussis, Staphylococcus  
 CC aureus, Listeria, Clostridium, rotavirus and papilloma virus. Compounds  
 CC derived from the analogues may be used similarly; the compounds may  
 CC also be prepared from antibiotics or antiarrhythmic agents. The analogues  
 CC may be used therapeutically or to coat medical devices; also they are  
 CC useful as surface disinfectants, as additives to shampoo or soaps, as  
 CC insecticides or herbicides, or as preservatives for foods and technical  
 CC materials. The analogues are administered by injection, lavage, orally  
 CC or topically, generally at 0.1-50 mg/kg. These analogues have a broader  
 CC spectrum of activity than indolicidin and modification as compounds  
 CC reduces their toxicity.  
 XX  
 Sequence 13 AA:  
 SQ  
 Query Match 39.9%; Score 73; DB 19; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 0.032;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RRWPWWPK 9  
 Db 2 rrwpwwpk 10  
 RESULT 13  
 AAY9175  
 ID AAY9175 standard; Peptide; 13 AA.  
 AC AAY9175;  
 XX  
 DT 06-JUN-2000 (first entry)  
 XX  
 DE Amino acid sequence of cationic peptide MBI 11CNR.  
 XX  
 KW Cationic Peptide; tumour; pharmaceutical composition; cancer; treatment;  
 KW leukemia; polyoxalkylene-modified; AAO; lymphoma; multiple myeloma;  
 KW breast; lung; ovary; cervix; uterus; skin; prostate; liver; colon;  
 KW multidrug resistance.  
 XX  
 OS Synthetic.

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XX WO965506-A2.  
 PN  
 XX  
 PD 23-DEC-1999.  
 XX  
 PR 14-JUN-1999; 99WO-CA00552.  
 XX  
 PR 12-JUN-1998; 98US-0096541.  
 XX  
 PA (MICR-) MICROLOGIX BIOTECH INC.  
 XX  
 PI Friedland HD, Krieger TJ, Taylor R, Erfle D, Fraser JR, West MH;  
 DR  
 XX  
 PT Novel pharmaceutical composition containing optionally activated  
 PT polyoxalkylene-modified cationic peptides, useful for treating tumours  
 XX  
 PS Disclosure; Page 14; 94pp; English.  
 XX  
 CC This sequence represents a cationic peptide amino acid sequence, which  
 CC can be used in the pharmaceutical composition of the invention. The  
 CC invention relates to a pharmaceutical composition containing at least one  
 CC activated polyoxalkylene (APO) modified cationic peptide. The  
 CC modification of peptides with APO increases their activity against tumour  
 CC cells, including those with a multidrug resistant phenotype. The  
 CC pharmaceutical composition can be used to treat tumours, specifically  
 CC lymphoma, leukaemia, multiple myeloma, or tumours of breast, lung, ovary,  
 CC cervix, uterus, skin, prostate, liver and colon.  
 XX  
 Sequence 13 AA:  
 SQ  
 Query Match 39.9%; Score 73; DB 21; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 0.032;  
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 RRWPWWPK 9  
 Db 2 rrwpwwpk 10  
 RESULT 14  
 AAR31891  
 ID AAR31891 standard; Protein; 248 AA.  
 AC AAR31891;  
 XX  
 DT 03-JUN-1993 (first entry)  
 XX  
 DE T.thermophilus HB8 26.8kD NADH-oxidase.  
 XX  
 KW ATCC 27334; reduced Nicotinamide Adenine Dinucleotide;  
 KW bio-sensor; EC 1.6.99.3; ss.  
 XX  
 OS Thermus thermophilus.  
 XX  
 FH Key Location/Qualifiers  
 FT Region 1..33  
 AC /note= "directly sequenced from purified protein"  
 XX  
 PN DE4221830-A.  
 XX  
 PD 28-JAN-1993.  
 XX  
 PF 03-JUL-1992; 92DE-4221830.  
 XX  
 PR 25-JUL-1991; 91DE-4124746.  
 XX  
 PA (GBFB ) GBF GES BIOTECH FORSCHUNG GMBH.  
 XX  
 PT Park H, Sprinzl M;



Thu Jan 31 11:07:42 2002

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